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The International Symposium on Medical Simulation (ISMS'04) was held in Cambridge, Massachusetts, USA on June 17th and June 18th, 2004. The objective of the symposium was to bring together the researchers in this field to present their most up-to-date, innovative and promising work, to highlight research trends and foster dialogue and debates among participants. To address questions about the areas for improvement and the future directions of the field, we organized a panel of experts including technical, medical and educational representatives.

This event was a continuation of successful symposium organized by Hervé Delingette and Nicholas Ayache, in France in June 2003. This year's symposium was co-organized by CIMIT / Harvard Medical School and Rutgers University.

We received 50 papers from 14 countries. We selected 16 papers for oral presentation and 16 papers for poster presentation. All accepted articles were allowed a written contribution of equal length in the proceedings. The contributions published in the proceedings are from research institutes, universities or companies from our diverse research community, including: Germany, Russia, Netherlands, France, Switzerland, Belgium, Spain, United Kingdom, Italy, Japan, Korea, Israel, Canada and the United States of America.

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#### Introduction

The objective of the symposium was to bring together the researchers in this rapidly developing field to present their most up-to-date, innovative and promising work, to highlight research trends and foster dialogue and debates among participants. Finally, to address questions about the areas for improvement and the future directions of the field, we organized a panel of experts including technical, medical and educational representatives.

**Body** 

The International Symposium on Medical Simulation (ISMS'04) was held in Cambridge, Massachusetts, USA on June 17<sup>th</sup> and June 18<sup>th</sup>, 2004.

The event was a continuation of successful symposium organized by Hervé Delingette and Nicholas Ayache, in France in June 2003. At that meeting we agreed that it would be beneficial for the community to have an annual gathering for the medical simulation community where researchers can exchange ideas and share their work in this emerging field. Thus, this year's symposium is co-organized by CIMIT / Harvard Medical School and Rutgers University.

We received a total of 50 papers from 14 countries. Each paper was evaluated by three members of the scientific committee. Based on the written reviews, we selected 16 papers for oral presentation and 16 papers for poster presentation. All accepted articles were allowed a written contribution of equal length in the proceedings. The contributions published are from research institutes, universities or companies from our diverse research community, including: Germany, Russia, Netherlands, France, Switzerland, Belgium, Spain, United Kingdom, Italy, Japan, Korea, Israel, Canada and the United States of America.

The event was organized into 6 sessions of oral presentations, interspersed with invited lectures, two poster/demo sessions and the final panel discussion. The five thematic sections covered key aspects of the multidisciplinary field of Medical Simulation: Soft Tissue Properties, Real-Time Deformable Models, Haptic Rendering, Soft Tissue Modeling, and Simulation Framework and Applications (2 sessions).

Our two invited lecturers gave extraordinary talks. Ajit Sachdeva, MD, the Director of the Division of Education for the American College of Surgeons, gave a talk entitled "Assurance of Competence and Patient Safety Through Simulation: The Evidence and the Promise." Anthony Gallagher, PhD, of Emory University gave a talk entitled "VR simulation for the OR and Cath. Lab; A Paradigm Shift in Training for Procedural Based Medicine."

On the night of the 17<sup>th</sup> a catered Clambake was given to provide an international audience with a view of an American tradition, and to help foster further talk and collaboration with the international medical simulation community.

# **Key Research Accomplishments / Reportable Outcomes**

See a ttached conference proceedings published by Springer – Verlag, LNCS 3 078 Stephane Cotin and Dimitris Metaxas (Eds.) for all published contributions.

### **Conclusions**

With great feedback on meeting we consider it a success. The successful exchange of ideas helped advance the field of medical simulation in general, and provided many young researchers the opportunity to view the work of others. The meeting ended without a concrete decision on where to host the next symposium. Since that time labs in Singapore, France and Switzerland have all offered to host next year's meeting.